Claims 1, 7, 13, 19, 23 and 27-31 have been amended. Claims 2-6, 8-12, 20-22, 24-26 are believed to be in condition for allowance with no amendments.

Claim 1 is directed to a method of supporting multiple displays per drawing surface. Claim 1 has been amended so that the step of receiving capability parameters regarding a first display of the multiple displays includes the limitation that the capability parameters comprise display resolution and display pixel depth. This change is supported in the specification on page 6 lines 7-9. Claim 1 has also been modified by removing the clause "which exceed display capabilities of each of the multiple displays."

Claim 7 is directed to a multiple display supporting module that contains a processing module and memory. Claim 7 has been amended to include the limitation that the capability parameters comprise display resolution and display pixel depth. This change is supported in the specification on page 6 lines 7-9. Claim 7 has also been modified by removing the clause "which exceed display capabilities of each of the multiple displays."

Claim 13 is directed to a digital storage medium for storing operational instructions that cause a processing module to support multiple displays. Claim 13 has been amended to include the limitation that the capability parameters comprise display resolution and display pixel depth. This change is supported in the specification on page 6 lines 7-9. Claim 13 has also been modified by removing the clause "which exceed display capabilities of each of the multiple displays."

Claim 19 is directed to a method for supporting multiple displays per drawing surface. Claim 19 has been amended to include a limitation that the capability parameters comprise display resolution and display pixel depth. This change is supported in the specification on page 6 lines 7-9. Claim 19 has also been modified by removing the clause "the selected display capabilities exceeding each of the multiple displays."

Claim 23 is directed to a multiple display supporting module. Claim 23 has been amended to include the limitation that the capability parameters comprise display resolution and display pixel depth. This change is supported in the specification on page 6 lines 7-9. Claim 23

has also been modified by removing the clause "the selected display capabilities exceeding each of the multiple displays."

The claims 27-31 are dependent claims which are dependent on claims 1, 7, 13, 19, and 23 respectively. Claims 27-31 have been modified to reflect the changes in claims 1, 7, 13, 19, and 23. Specifically, display resolution and display pixel depth have been removed from the items that comprise the capability parameters because they are now included within the corresponding independent claims.

Rejections Under 35 U.S.C. §103

Claims 1-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Butler, et al. (U.S. Patent No. 6,018,340) in view of Ishikura, et al. (U.S. Patent No. 5,585,821 in further view of Dye (U.S. Patent No. 6,108,014).

Butler describes the allocation of graphical information such as the position of a mouse cursor and application window between multiple monitors so as to define a virtual monitor space(abstract). Butler describes how to determine which of the multiple monitors a mouse cursor will be displayed in (col. 9 line 23 to col. 10 line 65). This is done by determining the monitor that is closest to the location to which the user has moved the cursor (col. 10 lines 54-57). The cursor is then displayed in a position just inside the edge of the determined monitor (col. 10 lines 56-57). Furthermore, Butler describes a computer system with a graphical user interface (GUI) for managing a plurality of applications, first and second device drivers, and a forking display driver (abstract). The forking display driver allocates the display of graphical information from the applications among two or more monitors (abstract). The computer system also contains a graphical device interface (GDI) that serves as an interface between the application programs and device driver (FIG. 5, col. 5 lines 11-18). As part of initialization, the GDI obtains a list of functions that the device driver supports such as drawing solid lines, and supporting particular fonts (col. 5 lines 34-54). These functions are those supported by the device driver and are not capability parameters such as display resolution and display pixel depth of one or more of the monitors. Butler appears to be silent on substituting selected display capabilities of multiple monitors.

Ishikura describes an apparatus and method for moving a mouse pointer among several monitors or among a plurality of windows displayed on a single monitor (abstract). Each of the monitors or screens has one or more icon display areas that correspond to the other monitors or screens (col. 3 lines 8-13). When the mouse pointer is moved to one of these icons, it jumps to the monitor or screen to which the icon corresponds (col. 3 lines 17-29).

Dye is directed to a method and system for displaying a number of video objects on a single monitor (abstract). The video objects are stored in memory using a different number of bits per pixel (col. 3 lines 16-18). A graphics controller assembles video signals from video objects stored in memory (col. 3 lines 18-21). Hence the graphics controller allows the computer system to simultaneously display objects stored in memory having different numbers of bits per pixel on a single monitor (col. 3 lines 32-34). Dye also teaches of a virtual color depth technique that reduces the amount of memory required (col. 6 lines 13-16).

Claim 1 is directed to a method of supporting multiple displays per drawing surface that includes the steps of receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; substituting selected display capabilities for the capability parameters; and providing the selected display capabilities to an operating system. Claim 1 is distinguished over Butler for at least the reasons, inter alia, that Butler does not teach of receiving capability parameters regarding a first display and substituting selected display capabilities for the capability parameters. As discussed above, Butler does speak of the GDI obtaining a list of functions that the device driver is capable of supporting (col. 5 lines 29-42). However, these are functions that the device driver is capable of supporting and are not capabilities of the display itself. Furthermore, as the Examiner admits, Butler does not teach of exchanging parameters that comprise display resolution and display pixel depth. Therefore claim 1 is distinguishable over Butler.

Claim 1 is distinguishable over Ishikura for the reasons, inter alia, that Ishikura also does not teach of receiving capability parameters regarding a first display and substituting selected display capabilities for the capability parameters. As discussed above, Ishikura is directed to switching among different displays or windows. No where does Ishikura teach of receiving capability parameters regarding the different displays. Furthermore, as the Examiner admits,

Ishikura does not teach of exchanging parameters that comprise display resolution or display pixel depth. Therefore claim 1 is also distinguishable over Ishikura.

Butler and Ishikura are both directed to systems with multiple displays while Dye is directed to a system with a single display. In Dye, the system displays multiple objects that are stored in memory using different numbers of pixels on a single display (monitor). Hence, the combination of Dye, Butler, and Ishikura would result in a system having multiple displays where the objects displayed on the multiple displays would be stored in memory using different numbers of bits per pixel.

As pointed out by the Examiner, Dye does mention display resolution in the context of describing the function of a color lookup table (col. 49 lines 64-67). However, the term "display resolution" is used in a different context than in claim 1. In Dye, the color lookup table is used to convert an 8 bit texture memory value into a 24 bit texture value which is used to display video data during a screen refresh mechanism (col. 50, lines 48-52). Therefore the objects with shaded textures are displayed with 24 bit texture resolution instead of 8 bit texture resolution even though only 8 bits are used for the texture memory. Hence "display resolution" is referring to the resolution with which the individual objects are displayed and not to a capability parameter regarding multiple displays. In this way Dye teaches away from the present invention since the "display resolution" of Dye is a property of the objects and not of the display as in claim 1. Hence it would not be possible to combine Dye with Butler and Ishikura to obtain the present invention.

Also, as pointed out by the examiner, Dye does use the term "pixel depth". However, pixel depth is used in a different context in Dye than is used in claim 1. Dye uses a virtual color depth technique to improve the use of system memory (col. 6 lines 13-15). With this technique, each application or window in a display uses only the amount of memory actually required (col. 6 lines 19-22). Each of the applications can be displayed at the same time while using only its required window size and pixel depth (col. 6 lines 25-28). Hence the pixel depth as used in Dye refers to a property of the different applications that can be displayed on a single display and not to a capability parameter that corresponds to one of the displays. Dye therefore teaches away from the present invention because it does not teach of a "display pixel depth" regarding a

display as used in claim 1. It would therefore not be possible to combine Dye with Butler and Ishikura to obtain the present invention.

For arguments' sake, assuming that it would be possible to combine Dye with Butler and Ishikura, Dye does not teach of receiving capability parameters regarding a first display and substituting selected display capabilities for the capability parameters. Hence, the combination of Butler, Ishikura, and Dye does not teach of receiving capability parameters regarding a first display and substituting selected display capabilities for the capability parameters. Furthermore, neither Butler, Ishikura, or Dye teach of capability parameters regarding a first display that comprise display resolution or display pixel depth. So for at least these reasons, claim 1 is allowable.

Claim 2 adds to the method of claim 1 the step of determining the selected display capabilities based on a composite of the displayed parameters of each of the multiple displays. Neither Butler, Ishikura or Dye teach of multiple displays having different display parameters. Therefore, the combination cannot teach of determining the selected display capabilities based on a composite of display parameters form multiple displays. Therefore, for at least this reason, claim 2 is allowable.

Claim 4 adds to the method of claim 1 that step (a) further comprises receiving the capability parameters in accordance with a system start up. Neither Butler, Ishikura, or Dye teach of receiving capability parameters regarding a first display of multiple displays at a system start-up. For at least this reason, claim 4 is allowable.

Claim 5 adds to the method of claim 4 that step (b) further comprises identifying the capability parameters as primary parameters in accordance with a first portion of the system start-up; providing the capability parameters to the operating system in accordance with the first portion of the system start-up; and identifying the selected display capabilities as the primary parameters in accordance with a second portion of the system start-up. Claim 5 is distinguishable over the combination of Butler, Ishikura, and Dye because none of the cited references contain the steps of identifying the capability parameters as primary parameters providing the capability parameters to the operating system, and identifying the selected display

capabilities as the primary parameters in accordance with a second portion of the system start-up. Therefore, claim 5 is allowable.

Claim 6 adds to the method of claim 1 that step (a) further comprises receiving the capability parameters in response to a monitor change process. Neither Butler, Ishikura, or Dye teach of a monitor change process. Therefore, for at least this reason claim 6 is allowable.

Claims 7-12 are directed to a multiple display supporting module that comprises a processing module and memory operably coupled to the processing module. The memory includes operational instructions that cause the processing module to execute substantially the same method as in claims 1-6. Therefore, claims 7-12 are allowable for substantially the same reasons as claims 1-6.

Claims 13-18 are directed to a digital storage medium for storing operational instructions that cause a processing module to support multiple displays associated with a drawing surface. The digital storage medium comprises a plurality of storage means for storing operational instructions that cause the processing module to perform substantially the same steps as the method of claims 1-6. For at least this reason, claims 13-18 are allowable.

Claim 19 is directed to a method of supporting multiple displays per drawing surface that includes the steps of receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; determining selected display capabilities based on the capability parameters of each display of the multiple displays; substituting selected display capabilities for the capability parameters; and providing the selected display capabilities to an operating system. Claim 19 is distinguished over Butler for at least the reason that Butler doesn't teach of receiving capability parameters regarding each display of the multiple displays or determining selected display parameters based on the capability parameters. As discussed with regard to claim 1, Butler does not teach of receiving capability parameters from displays. Butler also does not teach of the multiple displays having different capability parameters. Hence, even if Butler did teach of receiving capability parameters, there would be no need to receive capability parameters from each display of the multiple displays. Furthermore, Butler makes no mention of determining selected display parameters based on the capability parameters of each display. Also, as discussed above with

regard to claim 1, Butler makes no mention of capability parameters that comprise display resolution and display pixel depth. Therefore claim 19 is distinguishable over Butler.

Claim 19 is distinguishable over Ishikura for the reasons, inter alia, that Ishikura also does not teach of receiving capability parameters regarding each display of the multiple displays or determining selected display parameters based on the capability parameters. As discussed above, Ishikura is directed to switching among different displays or windows. No where does Ishikura teach of receiving capability parameters regarding the different displays. Ishikura also does not discuss determining selected display parameters based on the capability parameters of the different displays. Furthermore, as the Examiner admits, Ishikura does not teach of exchanging parameters that comprise display resolution or display pixel depth. Therefore claim 19 is also distinguishable over Ishikura.

As pointed out by the Examiner, Dye does mention display resolution in the context of describing the function of a color lookup table (col. 49 lines 64-67). However, the term "display resolution" is used in a different context than in claim 19. In Dye, the color lookup table is used to convert an 8 bit texture memory value into a 24 bit texture value which is used to display video data during a screen refresh mechanism (col. 50, lines 48-52). Therefore the objects with shaded textures are displayed with 24 bit texture resolution instead of 8 bit texture resolution even though only 8 bits are used for the texture memory. Hence "display resolution" is referring to the resolution with which the individual objects are displayed and not to a capability parameter for each of multiple displays. In this way Dye teaches away from the present invention since the "display resolution" of Dye is a property of the objects and not of the display as in claim 19. Hence it would not be possible to combine Dye with Butler and Ishikura to obtain the present invention.

Also, as pointed out by the examiner, Dye does use the term "pixel depth". However, pixel depth is used in a different context in Dye than is used in claim 19. Dye uses a virtual color depth technique to improve the use of system memory (col. 6 lines 13-15). With this technique, each application or window in a display uses only the amount of memory actually required (col. 6 lines 19-22). Each of the applications can be displayed at the same time while using only its required window size and pixel depth (col. 6 lines 25-28). Hence the pixel depth as used in Dye

refers to a property of the different applications that can be displayed on a single display and not to a capability parameter that corresponds to one of the displays. Dye therefore teaches away from the present invention because it does not teach of a "display pixel depth" for each display as in claim 19. It would therefore not be possible to combine Dye with Butler and Ishikura to obtain the present invention.

For arguments sake, assuming that it would be possible to combine Dye with Butler and Ishikura, Dye does not teach of receiving capability parameters regarding each display of the multiple displays or determining selected display parameters based on the capability parameters. Hence, the combination of Butler, Ishikura, and Dye does not teach of receiving capability parameters regarding each display of the multiple displays and determining selected display parameters based on the capability parameters. Furthermore, neither Butler, Ishikura, or Dye teach of capability parameters regarding a first display that comprise display resolution or display pixel depth. Hence claim 19 is allowable over the cited references for at least these reasons.

Claim 20 adds to the method of claim 19 that step (a) further comprises receiving the capability parameters in accordance with a system start up. Neither Butler, Ishikura, or Dye teach of receiving capability parameters for each display at a system start-up. For at least this reason, claim 20 is allowable.

Claim 21 adds to the method of claim 20 that step (b) further comprises identifying the capability parameters as primary parameters in accordance with a first portion of the system start-up; providing the capability parameters to the operating system in accordance with the first portion of the system start-up; and identifying the selected display capabilities as the primary parameters in accordance with a second portion of the system start-up. Claim 21 is distinguishable over the combination of Butler, Ishikura, and Dye because none of the cited references contain the steps of identifying the capability parameters as primary parameters providing the capability parameters to the operating system, and identifying the selected display capabilities as the primary parameters in accordance with a second portion of the system start-up. Therefore, claim 21 is allowable.

Claim 22 adds to the method of claim 1 that step (a) further comprises receiving the capability parameters in response to a monitor change process. Neither Butler, Ishikura, or Dye teach of a monitor change process. Therefore, for at least this reason claim 22 is allowable.

Claims 23-26 are directed to a multiple display supporting module that comprises a processing module and memory operably coupled to the processing module. The memory includes operational instructions that cause the processing module to execute substantially the same method as in claims 19-22. Therefore, claims 23-26 are allowable for substantially the same reasons as claims 19-22.

Claim 27 adds to claim 1 additional patentable subject matter. Claim 27 is allowable for at least the reason that claim 1 is allowable. Claim 28 adds to claim 7 additional patentable subject matter. Claim 28 is allowable for at least the reason that claim 7 is. Claim 29 adds to claim 13 additional patentable subject matter. Claim 29 is allowable for at least the reason that claim 13 is allowable. Claim 30 adds to claim 19 additional patentable subject matter. Claim 30 is allowable for at least the reason that claim 19 is allowable. Claim 31 adds to claim 23 additional patentable subject matter. Claim 31 is allowable for at least the reason that claim 23 is allowable.

Applicants have made certain amendments to the claims and specification. Applicant submit that none of these amendments introduce new matter into the specification.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

Applicants respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed agent if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please substitute claims 1, 7, 13, 19, 23, and 27-31 below for the claims having corresponding numbers:

1. (Amended) A method for supporting multiple displays per drawing surface, the method comprises the steps of:

a) receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth;

b) substituting selected display capabilities[, which exceed display capabilities of each of the multiple displays,] for the capability parameters; and

c) providing the selected display capabilities to an operating system.

7. (Amended) A multiple display supporting module comprises:

a processing module; and

memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to (a) receive capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; (b) substitute selected display capabilities[, which exceed display capabilities of each of the multiple displays,] for the capability of parameters; and (c) provide the selected display capabilities to an operating system.

13. (Amended) A digital storage medium for storing operational instructions that cause a processing module to support multiple displays associated with a drawing surface, the digital storage medium comprises:

first storage means for storing operational instructions that cause the processing module to receive capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth;

second storage means for storing operational instructions that cause the processing module to substitute selected display capabilities[, which exceed display capabilities of each of the multiple displays,] for the capability parameters; and

third storage means for storing operational instructions that cause the processing module to provide the selected display capabilities to an operating system.

19. A method for supporting multiple displays per drawing surface, the method comprises the steps of:

a) receiving capability parameters for each display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth;

b) determining selected display capabilities based on the capability parameters of each display of the multiple displays, [the selected display capabilities exceeding each of the multiple displays];

c) Substituting the selected display capabilities for the capability parameters of a respective display of the multiple displays; and

d) providing the selected display capabilities to an operating system.

23. A multiple display supporting module comprises:

a processing module; and

memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to execute the steps of

(a) receiving capability parameters for each display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth;

(b) determining selected display capabilities based on the capability parameters of each display of the multiple displays[, the selected display capabilities exceeding each of the multiple displays];

(c) substituting the selected display capabilities for the capability parameters of a respective display of the multiple displays; and

(d) providing the selected display capabilities to an operating system.

27. The method of claim 1 wherein the capability parameters further comprise a[display resolution, display pixel depth, and] display refresh rate.

28. The method of claim 7 wherein the capability parameters further comprise a[display resolution, display pixel depth, and] display refresh rate.

29. The method of claim 13 wherein the capability parameters further comprise a[display resolution, display pixel depth, and] display refresh rate.

30. The method of claim 19 wherein the capability parameters further comprise a[display resolution, display pixel depth, and] display refresh rate.

31. The method of claim 23 wherein the capability parameters further comprise a[display resolution, display pixel depth, and] display refresh rate.